Lampronia rupella, a species new to the Belgian fauna (Lepidoptera: Prodoxidae)

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Abstract. A small series of *Lampronia rupella* ([Denis & Schiffermüller], 1775) was caught at Malempré (prov. of Luxembourg) on 29 May 1990, leg. W. Hogenes and deposited in the collection of the Zoological Museum, Amsterdam (now at Naturalis, Leiden). On 5 June 2011, a specimen was photographed by the second author at Ovifat (prov. of Liège). This species is mentioned here for the first time from Belgium and information on its distribution in Europe and biology is presented.

Samenvatting. *Lampronia rupella*, een nieuwe soort voor de Belgische fauna (Lepidoptera: Prodoxidae)
Enkele exemplaren *Lampronia rupella* ([Denis & Schiffermüller], 1775) werden verzameld te Malempré (prov. Luxemburg) op 29 mei 1990, leg. W. Hogenes, coll. Zoölogisch Museum, Amsterdam. Op 5 juni 2011 werd door de tweede auteur een exemplaar gefotografeerd te Ovifat (prov. Liège). Deze soort wordt hier voor het eerst uit België vermeld en informatie over haar verspreiding in Europa en biologie wordt gegeven.

Résumé. *Lampronia rupella*, espèce nouvelle pour la faune belge (Lepidoptera: Prodoxidae)
Quelques exemplaires de *Lampronia rupella* ([Denis & Schiffermüller], 1775) ont été capturés à Malempré (Province de Luxembourg) le 29 mai 1990, leg. W. Hogenes, coll. Musée zoologique, Amsterdam (maintenant à Naturalis, Leiden). Le 5 juin 2011, un exemplaire fut photographié par le second auteur à Ovifat (Province de Liège). Cette espèce est mentionnée ici pour la première fois de la faune belge et des informations sur la répartition en Europe et la biologie sont données.

Key words: *Lampronia rupella* – Prodoxidae – Belgium – Faunistics – First record.

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Introduction

A small series of *Lampronia rupella* ([Denis & Schiffermüller], 1775) (fig. 1) was caught at Malempré (Belgium, Prov. of Luxembourg) on 29.v.1990, leg. W. Hogenes, coll. Zoological Museum, Amsterdam (presently in Naturalis, Leiden). More recently, on 05.vi.2011, a specimen was photographed at Ovifat (Prov. of Liège) (fig. 2) in a valley with high herbs and shrubs (leg. L. Jansen). This species has never been mentioned before from the Belgian fauna (De Prins 1998, De Prins & Steeman 2003–2011). Wingspan 13–17 mm, head rusty yellow, forewing dark brown with purplish sheen and four pale yellow spots; a dorsal spot near the base at a positive angle, one at tornus, and two on the costa inside and outside tornal spot, respectively. It is the only *Lampronia* species with two costal spots. It could, however, be confused with *Alloclemensia mesospilella* (Herrich-Schäffer, 1854) (Incurvariidae), but in that species the fringes are whitish yellow from the apex till the middle of the termen and the forewing ground colour is brown without the violet hue of *L. rupella*.

Biology

The habitat of *L. rupella* consists of shadow-rich, rather wet deciduous forests with an undergrowth of large herbs and shrubs (fig. 3), including *Cirsium*. The foodplant of the caterpillar is unknown, but it is reported to live on Asteraceae (Gustafsson 2008), however, this needs confirmation. In Sweden, the caterpillar is supposed to feed on *Cirsium heleniodes* and *Cicerbita alpina* (Bengtsson *et al.* 2008: 346). In France, Lhomme (1946–19633: 1131) reports *Adenostyles alpina* and *Homogyna alpina* (both Asteraceae) as foodplants. The caterpillars feed in April–May and the adults fly during June–July in sunshine, preferably in the morning.

Distribution

L. rupella is widespread in Central and East Europe, and becomes more rare towards the west. It is known from Albania, Austria, Bulgaria, Czech Republic, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Norway, Poland, Romania, Russia, Slovakia, Sweden, Switzerland, and Yugoslavia (van Nieukerken 2011). In North Europe, the species occurs in the whole of Norway and Finland, till the northernmost parts of Lapland. In Sweden, it has been recorded southwards till Dalsland, Västergötland and Uppland. It has not yet been found in Denmark. Eastwards, the species reaches the Altai mountains (Bengtsson *et al.* 2008: 347).

In Germany, *L. rupella* is known from Schleswig-Holstein, Nordrhein-Westfalen, Baden-Württemberg, Bayern, Sachsen, Sachsen-Anhalt, and Thüringen (Gaedike & Heinicke 1999: 44, LepiForum).

In France, the species has been recorded mainly from mountanous areas: Alpes-Maritimes, Basses-Alpes, Cantal, Doubs, Hautes-Alpes, Haute-Garonne, Hautes-Pyrénées, Haut-Rhin, Isère, Puy-de-Dôme, Pyrénées-Orientales, Saône-et-Loire et Savoie (Lhomme 1946–1963: 1131).

The species has not yet been mentioned from the other neighbouring countries Luxembourg, The Netherlands, and the United Kingdom.

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Figs. 1–2. Adults of *Lampronia rupella* ([Denis & Schiffermüller], 1775); **1.**– Belgium, Luxembourg, Malempré, 29 May 1990, leg. W. Hogenes, coll. W. De Prins. Scale 2 mm (Photo: Jurate De Prins); **2.**– Belgium, Liège, Ovifat, 05 June 2011 (Photo: Ludwig Jansen).

Fig. 3. Habitat of *Lampronia rupella* ([Denis & Schiffermüller], 1775) at Ovifat (Belgium, Province of Liège), 05 June 2011 (Photo Ludwig Jansen).

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